

**Notice of Allowability**

Application No.

10/628,596

Applicant(s)

DIRR, JOSEF

Examiner

Curtis B. Odom

Art Unit

2634

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amdt filed on 11/14/2005.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance             |
|   | 9. <input type="checkbox"/> Other _____  |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Frame on December 21, 2005.

The application has been amended as follows:

Claim 1 (currently amended): A process for the transmission of analog- and digital-coded information, characterized in that serial transmission takes place via one channel, both the analog and the digital coding taking place with a same synchronous alternating current of one frequency and phase position, wherein the code elements of the digital code are formed by the number, length, time of periods or half-periods of said alternating current and are transmitted as real code words or virtual code words and the code elements of the analog code in pulse amplitude modulated (PAM) samples are transmitted on the amplitudes of the periods or half-periods of said alternating current and inserted in series into the code alternating current, so that a coding alternating current, so that a coding alternating current is formed in uninterrupted sequence, wherein analog words or real code words are also inserted between the virtual code words as needed.

Claim 3 (currently amended): A process for the encoding of digitized information, characterized in that virtual code words are provided which are formed with an alternating current code made up the number, time, length or phase of said alternating current, which is transmitted, wherein one channel is formed from each parallel code element, the transmitted code words of various information are transmitted in series in this process, and analog code words are formed in this process between the virtual code words from pulse amplitude modulated (PAM) samples coded with the periods or half-periods of said alternating current, namely in a number that corresponds to that of the virtual code words.

Claim 4 (currently amended): The process of claim 1, further characterized in that the pulse amplitude modulated (PAM) samples are coded with the periods or half-periods of an alternating current and, namely, with the amplitudes of an alternating current of the same frequency and phase position, sampled in a time multiplexed manner, and transmitted in series in an uninterrupted sequence.

Claim 5 (currently amended): The process according to claims 1, 2, 3, or 4, further characterized in that the transmission of two coding alternating currents takes place on the bases of quadrature amplitude modulation (QAM).

Claim 6 (currently amended): The process according to claim 1, further characterized in that virtual code words are provided, which are formed with an alternating current code made up periods or half-periods of said alternating current, each of the same number, which are

Art Unit: 2634

transmitted, wherein one channel is formed from each parallel code element, in which the real code words of various kinds of information are coded, whereby the transmission of the virtual code words takes place, with it being possible to insert analog periods of said alternating current between the virtual code words in a number corresponding to the virtual code words.

Claim 7 (currently amended): The process according to claim 1, further characterized in that, between digital code words consisting of alternating current, a number of PAM-coded periods or half-periods of said alternating current that corresponds to the number of digital code words is introduced.

Claim 8, (currently amended): The process according to claims 1, 2, 3, or 4, further characterized in that the virtual code words to be transmitted are divided into two or more code words, the sum of their code elements remaining constant, and if need be the code words are exchanged with divided code words of various virtual code words.

#### **EXAMINER'S STATEMENTS OF REASONS FOR ALLOWANCE**

2. The following is an examiner's statement of reasons for allowance: Claims 1-8 are allowable over prior art because related references do not disclose performing analog and digital coding using the number, time, length, phase, periods and half-periods of an alternating current.

Analog and digital data are both coded on the same alternating current using periods and half-periods of the alternating current.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The examiner can normally be reached on Monday- Friday, 8-5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/628,596  
Art Unit: 2634

Page 6

Curtis Odom  
December 22, 2005



**STEPHEN CHIN**  
**SUPERVISORY PATENT EXAMINE**  
**TECHNOLOGY CENTER 2800**